

THE MOTHS OF INDIA.  
 SUPPLEMENTARY PAPER TO THE VOLUMES IN  
 "THE FAUNA OF BRITISH INDIA."  
 SERIES II. PART I.

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 (With Plate B.)

The following paper commences the 2nd series of supplementary papers on India Moths, in which I propose to include an abstract relating to Indian species taken from the volumes on the "Moths of the World," published by the British Museum, where will be found coloured figures of all species not figured elsewhere; the 1st volume deals with the *Syntomidae*, the most specialized family of the Noctuid branch of the *Lepidoptera*; the 2nd volume includes the sub-families *Nolineæ* and *Lithosiaceæ* of the *Arctiidae*, and will be followed by the sub-family *Arctiaceæ*, then the families *Agaristidae* and *Noctuidæ*. The genera are placed in the order adopted in those volumes, and the keys to the species will give the order which should be followed, the numbers attached to them referring to those in the "Fauna of India" volumes and the supplementary papers, the abstracts thus forming classifications and keys to the families which should, I think, be of use to Indian collectors now that our knowledge of the subject is considerably advanced.

SATURNIADÆ.

29 a. SALASSA OLIVACEA. Oberth. Et. Ent. xiii, p. 44, pl. 10, f. 107 (1890).

♂. Head and thorax red-brown; abdomen black-brown; pectus and ventral surface of abdomen olive-brown, some white hair on the tibiæ. Forewing dark brown irrorated with olive-yellow scales; the ocellus elliptical with black and thin narrow bluish-white ring; the sinuous postmedial line with small hyaline striæ, an indistinct dentate subterminal line, with the area beyond it strongly irrorated with olive-yellow. Hindwing dark brown; irrorated with olive-yellow, the costal half greyish to the subterminal line; a sinuous antemedial line; the ocellus with narrow black ring beyond the bluish-white ring; the postmedial line strongly incurved to costa, then sinuous; an indistinct subterminal dentate line with the area beyond it strongly irrorated with olive-yellow. Underside of both wings irrorated with white.

♀. Abdomen and wings with the ground-colour red-brown.

*Habitat*.—Manchuria; Tibet, Yatong. *Exp.* 120 mill.

EUPTEROTIDÆ.

Genus CLENORA.

*Clenora*, Swinh. A.M.N.H. (7), iii, p. 109 (1899).

Type. *C. engonata*.

Proboscis absent ; palpi minute ; antennæ short, bipectinate, the branches



*Clenora engonata* ♂  $\frac{1}{2}$

long, rapidly decreasing to before apex which is simple ; tibiæ without spurs ; the tarsi tufted with hair ; frenulum present. Forewing elongate, narrow, the costa strongly arched towards apex which is much produced, the termen angled at middle ; vein 2 from middle of cell ; 3 from long before angle ; 5 from middle of discocellulars ; 6 shortly stalked with 7, 8, 9, 10 ; 7 from beyond 9 ; 11 free. Hindwing with the tornus produced to a long acute point ; vein 2 from middle of cell ; 3, 4, from angle ; 5 from below angle of discocellulars ; 6, 7 very shortly stalked ; 8 from the cell near base and strongly arched.

Very close to *Gunda*, Wlk., but with the frenulum present.

47a. *Clenora engonata*, Swinh. A. M. N. H., (7), iii, p. 109.

♂. Head, thorax and abdomen dark red-brown ; thorax suffused with deep chocolate and irrorated with grey. Forewing dark red-brown suffused with black except towards inner margin and termen and irrorated with black ; two yellow points on inner margin before middle and one towards tornus ; two indistinct postmedial lines formed of grey scales angled below costa and not extending below vein 4 ; traces of a similar subterminal line waved below vein 4 ; a fine yellow terminal line and points on the veins. Hindwing dark red-brown with the tornal point yellow.

*Habitat*.—Karwar. *Exp.* 42 mill.

68. EUPTEROTE UNDATA. Insert (syn.) *E. crinita*, Swinh. A. M. N. H. (7), iii, p. 108.

A form like *nigricans* but without the yellow collar ; hindwing with some yellowish before the postmedial line and a prominent yellow crenulate subterminal line.—Karwar.

#### SPHINGIDÆ.

96a. *CYPA KINDERMANNI*, Led., Verh. Zool.-Bot. Ges. Wien, II, p. 22 (1852).

Head, tegulæ and patagia grey, head tinged with brown ; thorax olive-brown above ; abdomen grey dorsally tinged with brown. Forewing olive-grey ; a little pink at base of inner margin ; a curved whitish subbasal line ; an antemedial red-brown line strongly angled outwards below vein 2 and meeting the medial line which is angled inwards, the area between the two lines being filled in with red-brown suffusion from cell to inner margin ; a sinuous grey postmedial line angled inwards on vein 5 and defined on inner side by darker olive ; a red-brown patch on termen extending down to vein 3 and bounded above by a white line from apex, dentate on vein 7 ; a rufous patch at tornus. Hindwing pale red-brown, usually largely suffused with pink, the inner area

pale or tinged with pink; a diffused rufous antemedial line and slightly sinuous grey medial and postmedial lines with a more or less prominent dark patch with blue-grey mark on it towards tornus; the cilia white. Underside of forewing with the basal half crimson except the costa; hindwing crimson, with blackish patch near tornus with two blue-grey lines on it.

*Habitat.*—C. Asia; Persia; Kandahar; Chitral. *Exp.* 80-90 mill.

106a. *AMBULYX PÆCILUS*, Roths. Nov. Zool., v., p. 604 (1898).

♂. Head sap green; antennæ and a band between their bases whitish; thorax sap green coming to a point on metathorax, the outer parts ochreous-grey; abdomen ochreous-grey with dorsal green bands. Forewing ochreous-grey, the inner margin tinged with purplish; traces of an antemedial green line; a medial green band diffused on outer side, running out to an acute angle in submedian fold, where it is connected with tornus by green suffusion, the area beyond it tinged with fuscous except an ochreous-grey triangular patch on termen and a wedge-shaped green patch on apical part of costa, with a curved white line below it from apex to costa beyond middle. Hindwing ochreous-grey; a crimson patch from base to beyond middle not reaching costa or inner margin and emitting a spur towards apex; a grey band from vein 3 to tornus traversed by a dark line, with a dark patch before it on inner area and diffused green on its outer side; cilia of both wings green at base, pale at tips. Underside of forewing suffused with crimson on basal half except towards costa, the rest of both wings pale yellow-green with some grey on termen.

*Habitat.*—Murree. *Exp.* 80 mill.

\* 117a. *AMPELOPHAGA HARTERTI*, Roths., Iris, vii, p. 299 (1894).

"Forewings greenish-ash-grey with a small indistinct stigma in the cell and an angulated rust-red patch one-fourth from the outer margin. Hindwings blackish-brown. Head, thorax and abdomen grey. Underside rusty brownish-grey with the red patch very pronounced."

*Habitat.*—Assam, Margharita. *Exp.* 89 mill.

137. *THERETRA VELATA*, var. *albomarginata*, Roths. Nov. Zool., i, p. 78. (Pl. B, fig. 14.)

Forewing with more or less strongly developed white costal fascia.

138a. *CHÆROCAMPA HYPORHODA*, n. sp. (Pl. B, fig. 12.)

♂. Head, thorax and abdomen bright red-brown; shoulders and outer edge of patagia with grey-white stripe; pectus and ventral surface of abdomen pinkish; legs streaked with ochreous-white. Forewing bright red-brown, the costal edge ochreous-white, the base and basal half of inner margin grey; the basal half of subcostal and median nervures streaked with grey; a black discal point; an indistinct oblique grey medial band from cell to inner margin; traces of three oblique waved postmedial lines; a terminal grey band with waved inner edge attenuated to a point at apex and expanding below apex. Hindwing brown tinged with red towards termen and inner

margin; the cilia white towards tornus. Underside bright pink; wings with two indistinct curved lines just beyond middle and greyish terminal band with wavy inner edge.

*Habitat*.—Karwar (Davidson). *Exp.* 59 mill. Type in B. M.

184a. MACROGLOSSA GLAUCOPLAGA, n. sp. (Pl. B, fig. 13.)

♂. Dark brown tinged with greyish; palpi white below; pectus pale brown pencilled with dark brown; abdomen with orange and black lateral patch on 1st three segments, then orange-brown at sides with lateral black and white tufts, the ventral surface pale and dark brown with some black points. Forewing with obliquely curved antemedial dark brown band; bisinuate medial and two postmedial lines, the last wavy towards costa; a grey patch on costa from 1st postmedial line to apex with very irregular lower edge; traces of a wavy subterminal line. Hindwing blackish with rather narrow orange band from middle of costa to tornus; cilia orange towards tornus. Underside greyer brown; forewing with rufous discal patch and several indistinct minutely wavy lines. Hindwing with three medial wavy lines and orange patch on inner area.

*Habitat*.—Sikkim 2,000' (Pilscher). *Exp.* 46 mill. Type in B. M.

187. MACROGLOSSA BENGALENSIS. Insert (syn.) 185. *M. belia*.

#### NOTODONTIDÆ.

212. HAPIGIA OBLIQUA is from Trinidad and Venezuela.

224a. GARGETTA VIRIDIGRISÆA. Dudgeon, J. Bomb. N. H. Soc., xi, p. 626. (Pl. 1, fig. 3.)

♂. Antennæ bipectinate with long branches, the apical part simple. Forewing narrow with slight fold at base of vein 1 on underside but without tuft.

Vertex of head and base of tegulæ whitish. Forewing suffused with fuscous and the markings obscured. Hindwing whitish suffused with brown.

♀. Fuscous-brown, base of antennæ and collar black-brown; thorax suffused with greenish-grey. Forewing suffused with grey-green to beyond middle; a short wavy black subbasal line followed by a less prominent wavy line diffused towards costa; a slightly wavy antemedial line with diffused wavy line on its inner edge; orbicular and reniform rather indistinct, figure-of-8-shaped, with whitish outline; an indistinct highly dentate medial line bent outwards round cell; a more prominent dentate black postmedial line bent outwards at vein 5, with some blackish spots beyond it and patch on inner margin; subterminal and terminal series of small blackish lunulate spots. Hindwing uniform fuscous-brown.

*Habitat*.—Sikkim 1,800'; Ceylon. *Exp.* 56 mill.

225b. GARGETTA FERREOPICTA, n. sp.

♀. Pale brownish-grey; head and thorax red-brown. Forewing irrorated with dark rust-red; a subbasal black point below the cell; the antemedial

line acutely angled below costa, then erect and followed by dark rust-red patches on costa and vein 1, and two dark points on median nervure; a medial somewhat oblique series of four black striæ; a diffused rust-red patch on discocellulars with black discoidal lunule defined by grey on it and with traces of a line from it to costa and inner margin; two postmedial series of black points connected by an indistinct highly crenulate line, with a wedge-shaped, rust-red patch beyond it on costa and a diffused band from vein 5 to inner margin; a sinuous sub-terminal series of dark spots on a white line; a terminal series of points. Hindwing with darker band on terminal area, broad at costa, narrowing to torsus.

*Habitat.*—Ceylon, Trincomalee. *Exp.* 58 mm. *Type*—In B. M.

229c. EUTORNOPERA QUINQUESTRIATA, n. sp. (Pl. B, fig. 21.)

♂. Head and thorax ochreous and dark red-brown; abdomen ochreous dorsally tinged with brownish. Forewing ochreous suffused with dark red-brown except a patch on costa near base, the submedial interspace, and streaks beyond the cell above vein 5 and on apical part of costa; two short antemedial obliquely-placed white streaks in cell; a short streak in upper angle of cell, a longer streak beyond the cell on vein 3, and an oblique streak from beyond upper angle of cell to apex; a medial red-brown point above vein 1; an obscure postmedial series of points excurved below costa, then oblique, and with another series on their inner side; a series of points just inside termen, those below apex and at middle developed into spots, and the two points between them on white spots. Hindwing pale yellow.

*Habitat.*—Sikhim, 7,000 feet (Pilcher). *Exp.* 44 mm. *Type*—In B. M.

236c. PYDNA ATRIVITTATA, n. sp. (Pl. B, fig. 1.)

♂. Head, thorax and abdomen olive-brown, the last tinged with grey except at base and extremity. Forewing olive-brown, the terminal half paler; a black-brown fascia on median nervure from near base to well beyond middle with a pale ochreous streak above it on vein 4, and a leaden-grey streak above it in and beyond cell; a leaden-grey streak on basal part of vein 1; an indistinct ochreous discoidal spot; an indistinct fuscous line from middle of costa angled beyond cell and reaching middle of inner margin; the postmedial line represented by three indistinct series of points from costa to the fascia, where they are joined by an oblique streak from apex, and by an oblique line from the fascia to inner margin; a terminal series of points. Hindwing fuscous-brown, the cilia ochreous. Underside fuscous-brown.

*Habitat.*—Sikhim, 7,000 feet (Pilcher). *Exp.* 48 mm. *Type*—In B. M.

257a. FENTONIA DISCOSTICTA, n. sp.

♂. Purplish-brown; palpi and frons black-brown. Forewing with the base ochreous, with a grey-edged black line reaching to below cell, and followed by a rufous line reaching vein 1; three indistinct waved antemedial lines; a small prominent black discocellular spot; a grey and blackish



lunulate postmedial line strongly incurved and with ochreous on its inner edge from costa to vein 5, two rufous points before it on costa, and with several obscure lunulate dark lines beyond it. Hindwing uniform red-brown. Underside paler, forewing with the costa yellowish with some rufous points towards apex.

*Habitat.*—Khásis. *Exp.* 46 mm. *Type*—In coll. Elwes.

259a. FENTONIA FERRIFUSA, Dudgeon, Journ. Bomb. Nat. Hist. Soc., 1897, p. 634.

♂. Head, thorax and abdomen black-brown, head and collar mixed with grey. Forewing grey suffused with dull ferruginous, especially a patch on costa before apex; a black streak from base below median nervure to an obliquely curved line from base of costa expanding into a diffused black patch on inner margin; a wedge-shaped ferruginous antemedial mark from costa; an indistinct curved postmedial series of black points; a terminal series of points. Hindwing grey-brown.

♀. Thorax and abdomen grey.

*Habitat.*—Sikkim, 1,800 feet. *Exp.* ♂ 30, ♀ 36 mm.

264a. STAUROPIUS VIRESCENS, Moore, P. Z. S., 1879, p. 404.

♂. Head and thorax yellow-green; palpi ochreous, blackish at sides; antennæ with the branches rufous; pectus and legs below ochreous; abdomen pale ochreous irrorated with fuscous, a large dorsal tuft on first segment of green and metallic yellow and black scales, some green on dorsum at extremity, the anal tuft whitish. Forewing yellow-green irrorated with a few black scales; a brownish patch at base of inner margin; a series of four small yellowish and black antemedial spots angled below the cell, then oblique, two yellowish points beyond them; a dark discoidal point; a postmedial line formed by small yellowish spots with dark edges, oblique from costa to vein 4, then retracted to below end of cell and again oblique; a subterminal series of small blackish and yellow spots bent inwards to costa and a terminal series. Hindwing dark brown; the costal area yellow-green with indistinct dark medial, postmedial and subterminal lines. Underside of forewing pale yellow suffused with dark brown except towards margins, of hindwing uniform pale yellow.

*Habitat.*—Sikkim, 1,800 feet. *Exp.* 40 mm.

265. STAUROPIUS VIRIDESCENS, del. *S. virescens*.

293a. NOTODONTA PICTA, n. sp.

♂. Head and thorax dark brown; abdomen paler brown. Forewing dark red-brown variegated with pinkish, the apical third purplish-fuscous; traces of a dark sinuous antemedial line from cell to inner margin; the reniform and some marks below angle of cell pinkish, a yellow line with fine black edges arising from middle of vein 2, below which it is dentate, excurved below vein 1, then almost parallel to inner margin to near base; a black postmedial line excurved from costa to vein 2, where it is bent inwards, followed by a

curved yellow line with fine black edges ; some yellow on termen below middle. Hindwing pale yellow-brown.

*Habitat.*—Khásis. *Exp.* 46 mm. *Type*—In coll. Elwes.

298a. *HYPERÆSCHRA TRICHOSTICHA*, insert (syn.) *Stauropus clothus*, Swinh., A. M. N. H. (7), iii, p. 100.

Forewing with some white on orbicular and lower part of reniform.

*Habitat.*—Karwar.

306. *APELA DIVISA* is from Trinidad.

Nos. 309, *Spatalia costalis*, and 311, *Spatalia albifasciata* belong to the 2nd group with longer branches to the antennæ.

311a. *SPATALIA LATICOSTALIS*, n. sp. (Pl. B, fig. 15).

♂. Dark rufous-brown. Forewing with the costal half of wing to median nervure creamy white with an olive shade in end of cell and pinkish shade on costa above it ; a purple-brown and reddish apical patch, the veins and interspace below it streaked with brown ; the inner half of wing purplish-brown with three obscure waved pale and dark antemedial lines and double post-medial line ; a highly crenulate subterminal line. Hindwing fuscous-brown.

*Habitat.*—Khásis. *Exp.* 50 mm. *Type*—In B. M.

317a. *ICHTHYURA TRANSECTA*, n. sp. (Pl. B, fig. 20).

♀. Fuscous-brown, head and medial part of collar black. Forewing irrorated with fuscous ; a pale oblique subbasal line bent outwards on median nervure ; a pale oblique slightly sinuous antemedial line ; a pale oblique line across apical area angled below vein 4, then inwardly oblique and sinuous to inner margin ; a dark brown patch on apical area leaving the costa and margin pale brown and with an irregularly dentate edge, crossed by an obscure dark sinuous line in continuation of the sinuous part of the post-medial line and a subterminal series of dark specks.

*Habitat.*—Sikhim, 1,800 feet (Dudgeon). *Exp.* 40 mm. *Type*—In B. M.

#### SESIADÆ.

355a. *SCIAPTERON TRIZONATA*, n. sp.

♂. Black frons and inner side of palpi white ; some white scales on neck ; tegulæ blue-black ; shoulders with orange spots just behind head and in front of wings ; fore tarsi white ; abdomen with slight dorsal band on 1st segment, a complete band on 5th segment, and subdorsal bands on terminal segment, wings hyaline, the veins and margins black. Forewing with the margins broadly black ; a broad oblique band at discocellulars. Hindwing with discoidal bar.

*Habitat.*—Sikhim, 2,000 feet (Pileher). *Exp.* 24 mm. *Type*—In B. M.

363a. *ICHNEUMENOPTERA CERULIPÈS*, n. sp.

♂. Head and thorax black, palpi yellow, black above towards tips ; frons white at sides ; legs yellow and black, hind tibiæ and tarsi metallic blue above ; abdomen greenish-black, the 2nd, 4th and 5th segments fringed with white scales, the ventral surface yellowish ; wings hyaline, the veins and

margins black. Forewing with the margins rather broadly black; a discoidal bar; the termen rather broadly black, with a slight hyaline streak projecting into it between veins 7 and 8.

*Habitat*.—Sikhim, 2,000 feet (Pilcher). *Exp.* 22 mm. *Type*.—In B. M.

378a. TRICHO CEROTA UNIVITTA, n. sp.

♂. Bluish-black; abdomen with a few orange scales; traces of bands on 5th and 7th segments. Forewing with the terminal area tinged with golden cupreous; a narrow hyaline streak in cell. Hindwing hyaline, the veins and margins narrowly black.

*Habitat*.—Sikhim, 7,000 feet (Pilcher). *Exp.* 24 mm. *Type*.—In B. M.

Genus LEPIDOPODA, nov.

Proboscis fully developed; palpi upturned to above vertex of head, roughly scaled in front; antennæ of male ciliated, of female simple; mid-tibiæ clothed with rough hair; hind tibiæ and 1st two joints of tarsi with thick fringes of hair. Forewing with all the veins present, 7·8 stalked. Hindwing with veins 3·4 stalked; 5 absent; 6 from close to upper angle of cell.

383a. LEPIDOPODA HETEROGYNA, n. sp.

♂. Head, thorax and abdomen black; frons bronze colour; palpi in front, sides of frons and a ring round neck white; shoulders and extremities of patagia with some yellow scales; coxæ white; the base of hind tibiæ above, the spurs and underside of tarsi of all the legs white; abdomen with some white hair at sides at base, the segments edged with yellow



*Lepidopoda heterogyna*, ♂  $\frac{3}{2}$ .

and white scales; wings hyaline, the veins and margins black; forewing with fiery orange on outer side of discoidal bar and a few scales near apex; the subcostal and median nervures orange on underside; hindwing with cilia of inner margin white.

♀. Palpi and antennæ orange, the latter blackish above at tips; the ring round neck yellow; fore-legs with the outer side of coxæ, the tibiæ and tarsi fiery orange; mid and hind legs with the tibiæ and tarsi banded orange and black; (abdomen wanting) the lateral tufts at base tipped with orange. Forewing with an orange streak above inner margin, the orange on discocellulars and below apex more prominent. Underside of forewing with the veins and margins fiery orange except towards termen, the orange below apex prominent; hindwing with the veins near costa and end of cell fiery orange.

*Habitat*.—Cuddapah, Pullampet, 500 feet (W. H. Campbell). *Exp.* ♂ 22, ♀ 24 mm. *Type*.—In B. M.



SYNTOMIDÆ.

- A. Hindwing with veins 6·7 coincident.
- a.* Hindwing with vein 4 absent.
- a*<sup>1</sup>. Hindwing with veins 3 absent ..... 3. *Ceryx*.
- b*<sup>1</sup>. Hindwing with veins 3 absent.
- a*<sup>2</sup>. Hindwing with vein 5 from lower angle of cell.
- a*<sup>3</sup>. Forewing with vein 9 absent..... 1. *Psychotoë*.
- b*<sup>3</sup>. Forewing with vein 9 present.
- a*<sup>4</sup>. Forewing with vein 3 from close to angle of cell; 4·5 stalked... .. 4. *Trichæta*.
- b*<sup>4</sup>. Forewing with vein 3 from well before angle of cell; 4·5 usually from cell.
- a*<sup>5</sup>. Wings sparsely clothed with hair-like scales ..... 2. *Callitomis*.
- b*<sup>5</sup>. Wings clothed with scales and usually with hyaline patches... .. 5. *Syntomis*.
- b*<sup>2</sup>. Hindwing with vein 5 from well above angle of cell ..... 6. *Eressa*.
- b.* Hindwing with vein 4 present ..... 7. *Dysauxes*.
- B. Hindwing with veins 6·7 not coincident..... 8. *Euchromia*.

Genus PSYCHOTÖE.

466. PSYCHOTÖE DUVAUCELI, Boisd.

Genus CALLITOMIS.

- A. Abdomen with a yellow band on each segment ... 464. *multifasciata*.
- B. Abdomen with yellow bands on 1st and 5th segment ..... 462. *syntomoides*.
- C. Abdomen ochreous, without bands..... 463. *leucosoma*.

Genus CERYX.

- Ceryx*, Wllgrn., Wien. Ent. Mon., vii, p. 140 (1863)..... *Type.*  
*anthraciformis*.
- Syntomoides*, Hmpsn., Moths. Ind., 1, p. 209 (1892) ..... *imaon*.

Section I. Antennæ of male, bipectinate.

- A. Abdomen of male with yellow bands on basal and penultimate segments..... 406. *diptera*.
- B. Abdomen of male with basal yellow band only..... 407*a.* *ginorea*.

CERYX DIPTERA, Fabr. Syst. Ent., p. 555 (1775).

*Sphinx atereus*, Stoll, Pap. Exot. iv., p. 240, pl. 400, fig. A.

*Syntomis incipiens*, Wlk, xxxi, 68.

*Psychotoë brachypecten*, Hmpsn. Ill. Het., ix, p. 61, pl. 157, f. 23.

Section II Antennæ of male minutely serrate or simple.

- A. Abdomen with seven bands in ♂, six in ♀ ..... 445. *cherra*.
- B. Abdomen with four bands ..... 404. *hyalina*.
- C. Abdomen with two bands—
  - a. Abdomen with lateral yellow spots... 403a. *semicincta*.
  - b. Abdomen without lateral yellow spots.
    - a<sup>1</sup>. Hindwing with narrow terminal black band ..... 402. *godarti*.
    - b<sup>1</sup>. Hindwing with broad terminal black band extending nearly to cell..... 401. *imaon*.

CERYX CHERRA, Moore, Lep. Atk., p. 12 (1879).

*Syntomis quisqualis*, Swinh., A. M. N. H. (6), xiv, p. 441 (1894).

CERYX HYALINA, Moore, Lep. Atk., p. 13 (1879).

*Syntomis volans*, Swinh., Trans. Ent. Soc. 1890, p. 173, pl. 6, f. 6.

CERYX GODARTI, Boisd. Mon. Zyg., p. 115, pl. 7, f. 3 (1829).

*Syntomis libera*, Wlk., xxxi, 78 (1864).

*Syntomis fytchei*, Moore, P. Z. S., 1871, p. 246, pl. 18, f. 3.

*Syntomis cupreipennis*, Butl., Journ. Linn. Soc. Zool., xii, p. 347 (1876).

This may be an extreme form of *imaon*.

CERYX IMAON, Cram., Pap. Exot., iii, p. 94, p. 248, E. (1780).

*Syntomis fusiformis*, Wlk., vii, 1595 (1856).

„ *approximata*, Wlk., xxxi, 79 (1864).

„ *sargania*, Butl. Trans. Ent. Soc., 1879, p. 4.

„ *artina*, Butl. Journ. Linn. Soc., Zool., xii, p. 347 (1876).

„ *mota*, Swinh. Trans. Ent. Soc., 1891, p. 134.

Genus TRICHLÆTA.

Section I. Hindwing with veins 3 and 5 on a long stalk ..... 436. *tigrina*.

Section II. Hindwing with veins 3 and 5 from cell or very shortly stalked ..... 465. *teneiformis*.

Genus SYNTOMIS.

Section I. Antennæ of male bipectinate, of female serrate.

A. Abdomen with crimson basal band.

a. Hindwing hyaline with the veins and margins black.

a<sup>1</sup>. Frons, white ..... 460. *pectoralis*.

a<sup>1</sup>. Frons, black ..... 461. *thoracica*.

b. Hindwing black with small hyaline spots between veins 2 and 5..... 461b. *phenicozona*.

B. Abdomen with orange bands.

a. Wings with the markings pale yellow; abdomen with two bands and lateral spots ..... 451. *ochreipuncta*.

- b. Wings with the markings hyaline ;  
 abdomen with seven bands in male,  
 six in female ..... 452*a. actea.*

SYNTOMIS PECTORALIS, Wlk. 1. 133 (1854).

*Hydrusa basirufa*, Swinh. Cat. Het. Mus. Oxon. p. 51 (1892).

Section II. (*Hydrusa*) Antennæ of male serrate, of female simple.

A. Abdomen with seven orange bands in male, six in female.

a. Forewing with the veins black with orange streaks  
 below costa and on inner margin.

*a*<sup>1</sup>. Abdomen with the anal segment  
 black..... 425. *diaphana.*

*b*<sup>1</sup>. Abdomen with the anal segment  
 orange above..... 452. *baicea.*

b. Forewing with the veins golden  
 yellow ..... 453. *era.*

c. Forewing without yellow streaks .. 440. *huebneri.*

B. Abdomen of male with six orange bands. 449. *serrata.*

425. SYNTOMIS DIAPHANA, insert (syn.) *Syntomis vitreata*, Herr.—Schaff.  
 aussereur Schmett., f. 267 (1855).

440. SYNTOMIS HUEBNERI, insert (syns.) *Nacليا cingulata*, Wllgrn. Wien.  
 Ent. Mon., iv, p. 39 (1860). *Buthisia sangaris*, Wllgrn. Wien. Ent. Mon.,  
 vii, p. 139 (1863). *Hydrusa pyrrhoderia*, Meyr, P. Linn. Soc. N. S. W. (2), i,  
 p. 777 (1886). *Syntomis frustulenta*, Swinh. Cat. Het. Mus., Oxon., p. 44 (1892).

Section III. (*Syntomis*). Antennæ simple in both sexes.

A. Abdomen with the bands cupreous-red ..... 442. *passalis.*

B. Abdomen with the bands orange.

a. Wings with the markings orange, not hyaline.

*a*<sup>1</sup>. Abdomen with an orange band on each  
 segment ... 441. *wimberleyi.*

*b*<sup>1</sup>. Abdomen with orange basal patch and  
 band on 5th segment ..... 441*a. flaviguttata.*

b. Wings with the markings mostly hyaline.

*a*<sup>1</sup>. Abdomen with an orange band on each  
 segment.

*a*<sup>2</sup>. Abdomen with the extremity orange.

*a*<sup>3</sup>. Frons white..... 434. *vitrea.*

*b*<sup>3</sup>. Frons yellow.

*a*<sup>4</sup>. Wings with yellow patches in inter-  
 spaces of terminal area ..... 435. *submarginalis.*

*b*<sup>4</sup>. Wings without yellow patches on  
 terminal area.

*a*<sup>5</sup>. Wings yellowish hyaline..... 432. *sladeni.*

*b*<sup>5</sup>. Wings hyaline white..... 433. *grotet.*

c <sup>3</sup> . Frons black; antennæ yellow.....	437.	<i>chlorocera</i> .
b <sup>2</sup> . Abdomen with the extremity black.		
a <sup>3</sup> . Wings yellow hyaline.		
a <sup>4</sup> Forewing with the terminal black band dentate above vein 5 ; hindwing with it not dentate at vein 2 .....	430.	<i>newara</i> .
b <sup>4</sup> Forewing with the terminal black band not dentate at vein 5 ; hindwing with it dentate at vein 2.....	429.	<i>fervida</i> .
b <sup>3</sup> . Wings hyaline white.		
a <sup>4</sup> Forewing without black bar across submedian interspace.		
a <sup>5</sup> . Abdomen greenish-black ; forewing without hyaline streak between veins 4 and 5..... ..	424.	<i>masoni</i> .
b <sup>5</sup> . Abdomen purplish-black ; forewing with hyaline streak between veins 4 and 5.....	426.	<i>melæna</i> .
b <sup>4</sup> Forewing with black bar across sub- median interspace.		
a <sup>5</sup> . Frons orange.		
a <sup>6</sup> . The hyaline patches occupying most of wing ; forewing with elongate patches between veins 2 and 5. ....	438.	<i>luteifa scia</i> .
b <sup>6</sup> . The hyaline patches reduced to spots ; forewing without spots between veins 2 and 3 .....	439.	<i>berinda</i> .
b <sup>6</sup> . Frons black.....	443.	<i>formosa</i> .
b <sup>1</sup> . Abdomen with five orange bands.		
a <sup>2</sup> . Frons white .....	423.	<i>divisa</i> .
b <sup>2</sup> . Frons orange.		
a <sup>3</sup> . Wings hyaline with the veins and margins black... ..	<i>compta</i> .	
b <sup>3</sup> . Wings black with hyaline patches .....	<i>pentazonata</i> .	
c <sup>1</sup> . Abdomen with four orange bands.		
a <sup>2</sup> . Frons, tegulæ, patagia, and patches on thorax white .....	427.	<i>albifrons</i> .
b <sup>2</sup> . Frons white ; tegulæ and patagia black ...	422.	<i>quadrifascia-</i> <i>ta</i> .
c <sup>2</sup> . Frons and patches on tegulæ and patagia orange .....	421.	<i>flavifrons</i> .
d <sup>1</sup> . Abdomen with orange bands on 1st and 5th segments,		

- $\alpha^2$ . Abdomen with lateral orange spots between the bands.
- $\alpha^3$ . Forewing with yellowish hyaline markings occupying the greater part of wing..... 417. *gelatina*.
- $b^3$ . Forewing with the hyaline markings not yellowish.
- $\alpha^4$ . Forewing brown with oblique series of hyaline markings between base of inner margin and costa beyond middle 418. *extensa*.
- $b^4$ . Forewing black with hyaline spots between veins 3 and 5.
- $\alpha^5$ . Tegulae and patagia yellow ..... 420. *klasiana*.
- $b^5$ . Tegulae and patagia black ..... 419. *lucina*.
- $b^2$ . Abdomen without lateral orange spots.
- $\alpha^3$ . Neck with an orange ring.
- $\alpha^4$ . Colour black.
- $\alpha^5$ . Forewing with hyaline spot above vein 6, the spots large ... ..... 412. *cyssea*.
- $b^5$ . Forewing without hyaline spot above vein 6, all the spots much reduced.
- $\alpha^6$ . Hindwing without spot above vein 2, the spot below the cell, moderate and rounded..... 414. *insucta*.
- $b^6$ . Hindwing with specks above vein 2, the spot below the cell narrow and bar shaped' ..... 416. *albopex*.
- $b^4$ . Colour brown..... *elongata*.
- $b^3$ . Neck without an orange ring.
- $\alpha^4$ . Metathorax with an orange patch.
- $\alpha^5$ . Hindwing with the hyaline patch becoming bright orange on inner margin ..... 410. *sperbius*.
- $b^5$ . Hindwing without orange on inner margin..... 403. *hydatina*.
- $b^4$ . Metathorax without orange patch.
- $\alpha^5$ . Wings with the spots large, size large..... 411. *bicincta*.
- $b^5$ . Wings with the spots minute, size small..... 413. *minor*.
- $c^2$ . Abdomen with ventral yellow band on 5th segment ..... 409. *unifascia*.



SYNTOMIS FLAVIGUTTATA, n. sp. (Pl. B, fig. 2.)

♂. Blue-black; antennæ white at tips; pectus with orange spots; abdomen with orange dorsal spot on 1st segment and a band on 5th segment. Forewing with elliptical orange spot below base of cell: a quadrate spot in end of cell; an oblique elliptical spot below vein 2, and spots above veins 3, 4 and 6. Hindwing with orange patch below and beyond the cell extending to near termen, its outer edge angled above vein 2.

*Habitat*.—Chitral, Jhela Drosh (Capt. S. W. Harris). *Exp.* 28mm.  
*Type*—In British Museum.

442. SYNTOMIS PASSALIS, insert (syn.) *Syntomis latreillii*, Boisd., Mon. Zyg., p. 117, pl. 7, f. 5 (1829).

434. SYNTOMIS VITREA, insert (syn.) *Syntomis polyzonaat*, Hmps., Trans. Ent. Soc., 1895, p. 283.

424. SYNTOMIS MASONI, insert (syn.) *Syntomis davidi*, Poug., Bull. Soc. Ent. Fr., (6), iv, p. cxxxvi (1885).

426. SYNTOMIS MELÆNA, insert (syn.) *Syntomis andersoni*, Moore, P. Z. S., 1871, p. 244, pl. 18, f. 1. Anderson's researches in W. Yunnan, p. 926, p. 81, f. 4.

423a. SYNTOMIS COMPTA, Wlk. Char. Undescr. Het., p. 89 (1869), Hmps., Cat. Lep. Phal., B. M., 1, p. 99, pl. v, f. 1.

♂. Head and thorax black; frons, tegulæ, patagia and patches on thorax, pectus, and legs orange; abdomen greenish-black with five orange bands; wings hyaline, the veins and margins black. Forewing with orange streaks below costa and above inner margin; the interspaces between veins 5 and 6 black; the terminal band expanding towards apex and slightly above vein 2. Hindwing with the costa and inner margin orange; the terminal black band expanding towards apex and dentate below vein 2.

*Habitat*.—Sikhim; Khâsis. *Exp.* 38 mm.

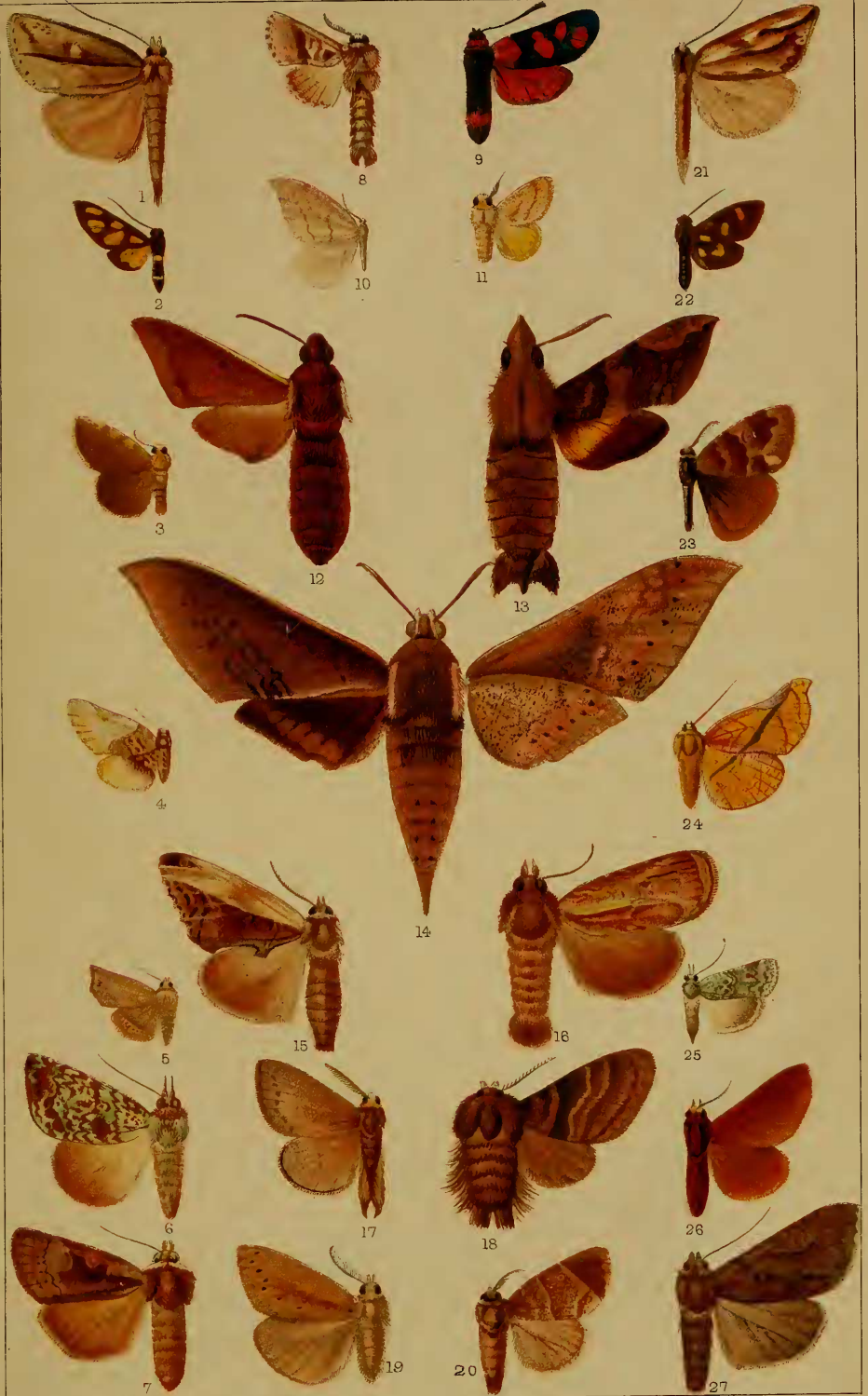
423b. SYNTOMIS PENTAZONATA, Hmps., Cat. Lep. Phal. B. M., 1, p. 99, pl. 3, f. 27 (1898).

Black with a slight purple gloss; frons, tegulæ and large spots on patagia orange; thorax with lateral orange spots; antennæ white at tips; tarsi with the 1st joint white; abdomen with five orange bands. Forewing with quadrate yellowish hyaline spot below base of cell; an oblique patch below vein 2, extending nearly to termen; a spot above vein 6, and small spot above 7; two large spots between veins 3 and 5; cilia white below apex. Hindwing with hyaline spot below the cell becoming orange towards inner margin; a postmedial spot between veins 2 and 5.

*Habitat*.—Burma, N. Khyen Hills. *Exp.* 30-36 mm.

418a. SYNTOMIS ELONGATA, n. sp.

♂. Grey-brown; frons and back of head orange; antennæ white at tips; tarsi with the 1st joint white; abdomen with orange dorsal patch on 1st segment, and band on 5th. Forewing with quadrate hyaline spot in end of cell; a small spot below base of cell and bar-shaped spot below the



E. C. Knight ad nat. lith.

West, Newman chromo.

INDIAN MOTHS.